Lake Forest Open Lands Association – Mellody Farm Floodplain Restoration Project

Introduction

In 1994, the Lake Forest Open Lands Association (LFOLA) collaborated with a local developer to save 50 acres of a 76-acre site called Mellody Farm along the Middle Fork of the North Branch Chicago River. This parcel had formerly been heavily farmed and grazed. Three years later, LFOLA partnered with the Friends of the Chicago River and the U.S. Fish and Wildlife Service to restore over 2,000 feet of streambank along the Middle Fork. LFOLA's land management policy calls for its properties to be restored to their original native condition as closely as possible, and maintained as prairies, wetlands, and savannas for the protection of local flora and fauna and to educate people about Illinois' original landscape. LFOLA also operates an extensive environmental education program.

Project Description and Goals

In 1994, LFOLA moved to preserve 50 acres along the Middle Fork of the North Branch of the Chicago River, just north of Route 60 and west of Route 43 (see map on last page). This land, locally known as Mellody Farm, is adjacent to the 450-acre Middle Fork Savanna Forest Preserve owned by the Lake County Forest Preserve District.

Mellody Farm includes nearly one-half mile of river frontage along the Middle Fork. The Middle Fork, also known as the West Skokie Drainage Ditch, is typical of much of the North Branch Chicago River system. It was channelized earlier this century and large spoil piles line the riverbank from dredging done to straighten and deepen the river in 1938. The spoil piles form a physical barrier separating the river from the adjacent floodplain, making the river inaccessible to people and the floodplain inaccessible for floodwater storage. Over the years, the spoils themselves have become covered with buckthorn and other weedy trees that have completely suppressed the ground layer vegetation. This has resulted in bare soil on the steep slopes of the spoils that exacerbates streambank erosion.

In early 1997, the Friends of the Chicago River (FOCR) approved a proposal by the LFOLA to address these problems along over 2000 feet of riverbank at the Mellody Farm site. In March 1997, the IEPA formally approved funding for the project, budgeted at $57,500 with a 50% reimbursement from the IEPA under the FOCR's existing 319 grant from that agency. Work began in June following receipt of a US Army Corps of Engineers permit and approval by the Lake County Stormwater Management Commission through its local agent, the City of Lake Forest. The USFWS and the Lake County Forest Preserve District’s Youth Conservation Corps provided additional assistance.

LFOLA cut all non-native and invasive brush and trees, removed the spoil piles, and reshaped and replanted the streambank to recreate the original grades and vegetation that existed along the river before dredging. Since the river itself is lower than its original elevation, work involved

sloping existing grades down to the new river level. Approximately 6,000 cubic yards of earth were removed from the riverbank. The original topsoil was found below the spoil banks and saved for later re-spreading on the finished grades. Approximately 2,400 cubic yards were removed entirely from the floodplain, thus providing significant increased flood storage. Riverbanks that were formerly nearly vertical or at 1:1 slope were reworked to a minimum of 10:1 grades and covered with new topsoil. The base for a new trail with river overlooks was also constructed and covered with wood chips so that visitors can have a first-hand experience of the entire restoration process and have access to the river itself.

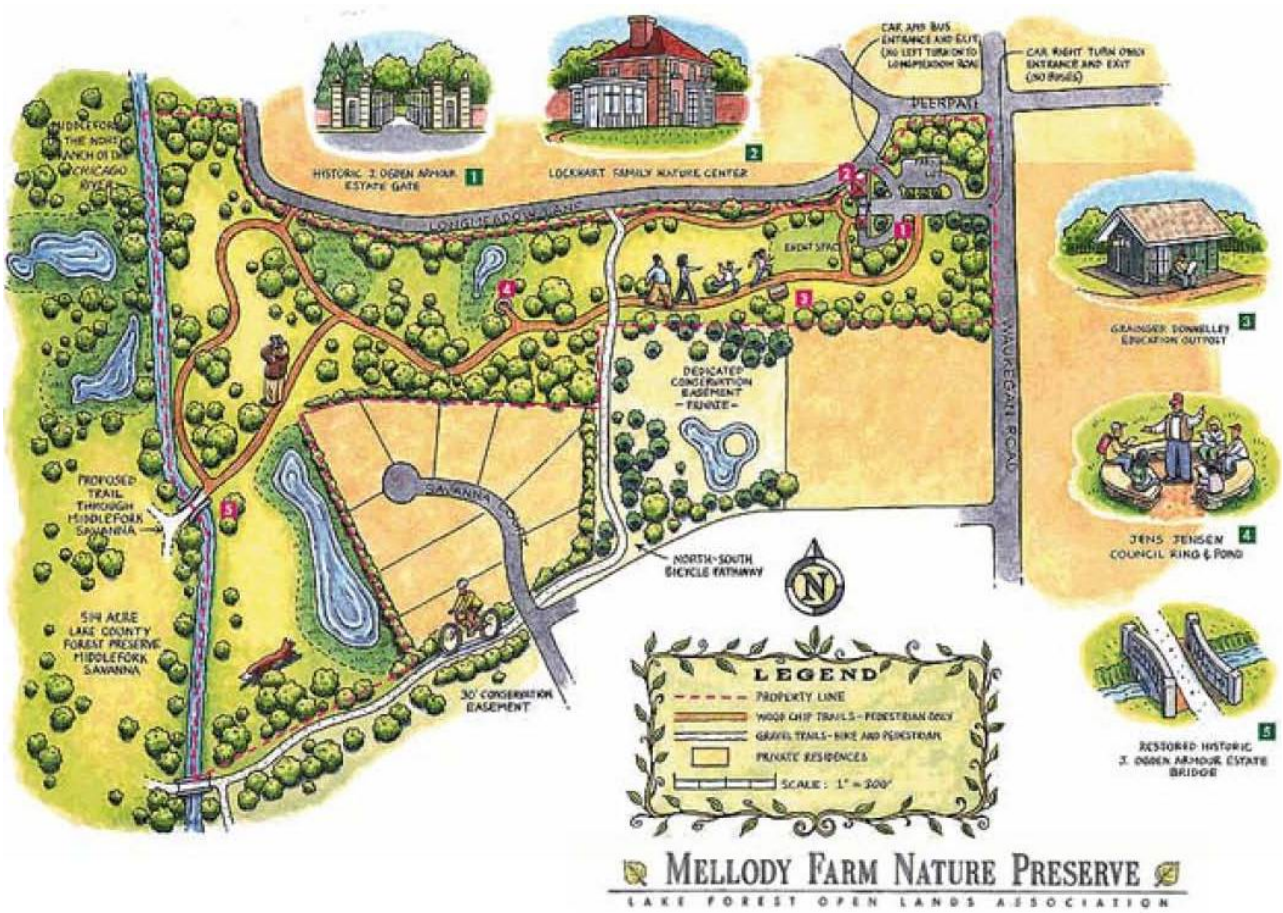
Once the soil moving work was finished, the planting, seeding and erosion control were completed by the Lake County Forest Preserve District's Youth Conservation Corps (YCC) under the guidance of the plant contractor and the LFOLA. LFOLA staff and the YCC seeded and planted the new banks with approximately 7,000 wet-mesic prairie and sedge meadow plants, and over 100 pounds of native grass and forb seed. In all approximately 90 species were used. The toe of the slopes was anchored with a coconut fiber roll manufactured on-site by the YCC, which then also planted the roll with willow seedlings collected on-site. The entire project was then mulched with North American Green S-75 erosion control blanket, and received regular watering for the rest of the summer.

Benefits

The Mellody Farm project serves as a regional model allowing other landowners to see a practical way to restore a river edge, open it up for public use, and return a large section of the floodplain to its original function. It also demonstrates how to control erosion through proper grading and vegetation management.

The YCC component was a crucial part of this project, and produced positive results for the entire program. YCC "members" gained hands-on experience in the planting and erosion control phases of the project, and the entire YCC board visited the site at its annual inspection meeting.

Following the completion of the streambank and floodplain restoration, LFOLA restored a historic bridge and installed a wood chip trail and benches along the Middle Fork for public use and education programs. LFOLA continues to maintain and enhance the project site.


HISTORIC J. OGDEN ARMOUR ESTATE GATE
LOCKHART FAMILY NATURE CENTER
CAR AND BUS ENTRANCE AND EXIT (NO LEFT TURN ONTO LONGPOND ROAD)
CAR RIGHT TURN ONLY ENTRANCE AND EXIT (NO BUSES)
DEERPATH
LONGPOND LANE
EVENT SPACE
GRAINGER DONNELLEY EDUCATION OUTPOST
DEDICATED CONSERVATION EASEMENT - FUNNIE -
SAVANNA LOOP
NORTH-SOUTH BICYCLE PATHWAY
PROPOSED TRAIL THROUGH MIDDLEFORK SAVANNA
514 ACRE LAKE COUNTY FOREST PRESERVE MIDDLEFORK SAVANNA
30' CONSERVATION EASEMENT
WAUKEGAN ROAD
JENS JENSEN COUNCIL RING & POND
RESTORED HISTORIC J. OGDEN ARMOUR ESTATE BRIDGE
LEGEND
PROPERTY LINE
WOOD CHIP TRAILS - PEDESTRIAN ONLY
GRAVEL TRAILS - BIKE AND PEDESTRIAN
PRIVATE RESIDENCES
SCALE: 1" = 300'
MELLODY FARM NATURE PRESERVE
LAKE FOREST OPEN LANDS ASSOCIATION